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Remarks

Applicants appreciate the Examiner's careful study of the pending application and claims.

In this non-final Office action, the Examiner rejected Claims 9 and 16 under 35 U.S.C. § 112, second paragraph, as indefinite for failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 9 and 16 are currently amended to overcome the 35 U.S.C. § 112 rejection. Specifically, the terms "cap" and "closure" have been replaced with the term "cap assembly." The "cap assembly" term is supported throughout the specification as filed; e.g., page 17 lines 4-22, or Paragraphs 0075 and 0076 of corresponding Patent Application Publication No. 20030170149. Therefore this recitation avoids introducing new matter.

The Examiner also rejected Claims 9 and 16 under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. No. 5,932,075 to Strauss, *et al.*, in view of U.S. Pat. No. 6,561,012 to Sadler.

Regarding Claim 9, the Examiner states that

... Sadler discloses a needle for extending from the transducer, through the cap (108) and into the vessel and for providing pressure communication between the interior of the vessel and the transducer and a collet (sleeve, 40) for engaging and maintaining the transducer, the needle, the closure and the vessel in linear relationship by exerting a radial force inwardly against the vessel and an axial force linearly against the cap so that the pressure in the vessel is transmitted to the transducer while the vessel is in use (Figure 8).

The Examiner further states that it would have been obvious

... to modify Strauss *et al.* to include a needle extending from the transducer, through the closure and into the vessel and for providing pressure communication between the interior of the vessel and the transducer and a collet for engaging and maintaining the transducer, the needle, the closure and the vessel in linear relationship by exerting a radial force inwardly against the vessel and an axial force linearly against the cap so that the pressure in the vessel is transmitted to the transducer while the vessel is in use.

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First, Applicants respectfully submit that neither Strauss nor Sadler discloses or suggests any structure that exerts both (i) a radial force inwardly against the vessel and (ii) an axial force linearly against the cap assembly.

Applicants respectfully submit that the '075 patent in combination with the '012 patent does not obviate Claim 9. Claim 9 claims, in part, a collet for engaging and maintaining the transducer, the needle, the closure (cap assembly), and the vessel in linear relationship by exerting a radial force inwardly against the cylindrical vessel and an axial force linearly against the cap assembly so that the pressure in the vessel is transmitted to the transducer while the vessel is in use.

The claimed invention maintains inward radial force using the collet, specifically the collet leaves. Figure 11 shows that when the vessel is in place in the removable attenuator, the collet assembly can clamp it in place and at the same time maintain an appropriate pressure against the septum. Simultaneously, the needle is seated against the transducer in a manner which permits the pressure to be accurately measured. This maintains the integrity of the vessel and prevents it from becoming dislodged when gases generated by the reaction increase the pressure in the vessel.

Further illustrated in Figure 11, the collet leaves maintain the sealed integrity of the cap assembly after the cap assembly seals the vessel. This is accomplished when the collet leaves (107) engage portions of the attenuator (33) and vessel (105) in a radial fashion and the cap assembly (132) in a linear fashion. In this manner, the invention can withstand pressures up to 1000 psi. See paragraphs 0073-75 and 0086.

The '075 patent is designed to operate at pressures above atmospheric (column 7, lines 43-45), however, it is silent with respect to the collet.

The sleeve disclosed in the '012 patent fails to disclose engaging and maintaining the transducer, the needle, the cap assembly, and the vessel in linear relationship by exerting a radial force inwardly against the cylindrical vessel and an axial force linearly against the cap

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assembly. The sleeve disclosed in the '012 patent abuts to the lid of a bottle and retracts to allow the needle to penetrate the septum. See column 7, lines 26-34. One of ordinary skill in the art will immediately recognize that this design is not robust enough to withstand the high pressures that can be generated during microwave-assisted reactions. In fact, the '012 patent states a preferred carrier gas pressure of one and a half pounds per square inch (column 4, lines 12-14).

Therefore, a person of ordinary skill in the art would not combine the cited references to arrive at the claimed invention. The elevated pressure disclosed in the '075 patent would destroy the apparatus disclosed in the '012 patent. Thus, the combination is inapt.

Applicants respectfully submit that the '075 patent in combination with the '012 patent does not obviate Claim 16 for the same reason as previously stated. To reiterate, one of ordinary skill in the art would not combine a batch reactor disclosing a pressure of 100 atmospheres (Strauss *et al.*) with a moisture flow analyzer disclosing a preferred carrier gas pressure of 1.5 psi (Sadler) to invent a pressure measurement instrument capable of measuring up to 1000 psi.

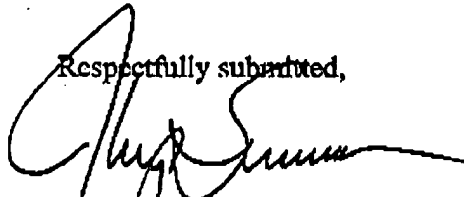
Furthermore, neither Strauss nor Sadler disclose or suggest exerting a radial force inwardly against the vessel while exerting an axial force linearly against the cap assembly. Thus, even when the references are combined, they fail to disclose or suggest one of the elements recited in both of Claims 9 and 16.

Based on the foregoing amendments, Applicants respectfully submit that Claims 9 and 16 are in condition for immediate allowance and the same is requested.

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Respectfully submitted,

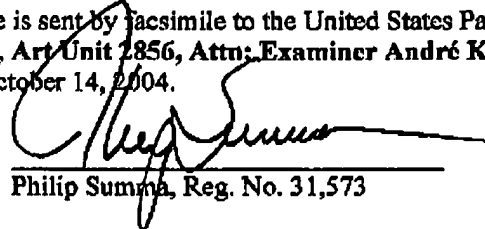


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I hereby certify that this correspondence is sent by facsimile to the United States Patent and Trademark Office, c/o Technology Center 2800, Art Unit 2856, Attn: Examiner André K. Jackson, at central facsimile number 703-872-9306 on October 14, 2004.


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